INTERACTIVE WAGERING SYSTEM
WITH AUTOMATIC RUNNER SELECTION

Background of the Invention

5   This invention relates to interactive
wagering, and more particularly, to interactive
wagering applications that allow runners for wagers on
races to be automatically selected.

Wagering is a popular leisure activity. For
10 example, many racing fans wager on events such as
horse, dog, and harness racing. However, it may be
inconvenient to attend racing events in person. Not
all racing fans have sufficient time to visit
racetracks as often as they would like and some fans
15 have difficulties in obtaining suitable transportation
to the track. Off-track betting establishments are
available for fans who cannot attend racing events in
person, but fans must still travel to the off-track
betting establishments.

20   As a result, systems have been developed in
which fans may place off-track wagers using personal
computers connected to the Internet, standard
telephones, or set-top boxes.

It is an object of the present invention to
25 improve such systems by providing an interactive

wagering system that automatically generates runner
numbers for users to use in placing wagers.

Summary of the Invention

An interactive wagering system is provided in
5   which an interactive wagering application automatically
randomly selects a horse or horses for a wager on a
race to be run. The user may select a racetrack for
the wager, a desired race at that racetrack, a desired
wager type (win, place, show, exacta, etc.), and a
10   desired wager amount. The user may also select an on-
screen option that directs the interactive wagering
application to automatically randomly select which
horse or horses to use for the wager. If the user is
satisfied with the horse or horses that the interactive
15   wagering application has randomly selected for the
wager, the user may submit the wager for processing by
a transaction processing and subscription management
system.

If desired, the on-screen option that is used
20   to invoke the automatic horse selection feature may be
presented for the user on a horse selection screen.
The user may also be provided with an opportunity to
select horses manually. A graphic image that is
related to the horses that are automatically selected
25   may be displayed on the horse selection screen.

The interactive wagering application may be
implemented using various platforms including set-top
box arrangements and other user television equipment,
personal computers, notebook computers, handheld
30   computers and other user computer equipment, cellular

telephones with displays, telephones without displays, and other user telephone equipment, etc.

The interactive wagering application may be used to place wagers on various different types of

5 races, including dog races, horse races, harness races, etc.

Further features of the invention, its nature and various advantages will be more apparent from the accompanying drawings and the following detailed

10 description of the preferred embodiments.

Brief Description of the Drawings

FIG. 1 is a schematic diagram of an illustrative interactive wagering system on which an interactive wagering application may be implemented in

15 accordance with the present invention.

FIG. 2 shows an illustrative racetrack selection screen that may be provided by the interactive wagering application in accordance with the present invention.

20 FIG. 3 shows an illustrative race selection screen that may be provided by the interactive wagering application in accordance with the present invention.

FIG. 4 shows an illustrative wager type selection screen that may be provided by the

25 interactive wagering application in accordance with the present invention.

FIG. 5 shows an illustrative horse selection screen that may be provided by the interactive wagering application in accordance with the present invention.

30 FIG. 6 shows an illustrative wager amount selection screen that may be provided by the

interactive wagering application in accordance with the present invention.

FIG. 7 shows an illustrative wager list screen that may be provided by the interactive wagering application in accordance with the present invention.

FIG. 8 is a flow chart of illustrative steps involved in using the interactive wagering application in accordance with the present invention.

Detailed Description of the Preferred Embodiments

An illustrative interactive wagering system 10 in accordance with the present invention is shown in FIG. 1. Aspects of the invention apply to various different types of wagering, but are described herein primarily in the context of interactive wagering on races (e.g., horse races) for specificity and clarity.

Races may be run at racetracks 12, which may be located at various geographic locations. Races run at the racetracks may be simulcast to television viewers. For example, simulcast videos may be provided to users with satellite receivers or to off-track betting establishments via satellite.

System 10 may be used to provide an interactive wagering service to users of various user equipment. An interactive wagering application may be used to provide the wagering service. The interactive wagering application may run locally on the user equipment (e.g., on a set-top box, personal computer, cellular telephone, handheld computing device, etc.) or may run using a client-server or distributed architecture where some of the application is implemented locally on the user equipment in the form

of a client process and some of the application is
implemented at a remote location (e.g., on a server
computer or other such equipment in the system) as a
server process. These arrangements are merely

5   illustrative. Other suitable techniques for
implementing the interactive wagering application may
be used if desired.

         ·Real-time videos from racetracks 12 may also
be provided to video production system 14 for

10   distribution to users as part of a television wagering
service (i.e., a wagering-related television channel or
Internet-delivered service or the like). If desired,
multiple simulcast videos may be provided to video
production system 14 in real-time. Talent (e.g.,

15   commentators) for the television wagering service
provided by the interactive wagering application may be
located at studio 16. Studio 16 may provide a video
feed containing commentary and the like to video
production system 14. Graphic overlays for the

20   television wagering service may be added to the service
at video production system 14.

         The television wagering service may use video
production system 14 to combine selected video segments
from desired racing simulcasts with the video feed from

25   studio 16 and suitable graphic overlays. If desired,
video production system 14 or a separate facility may
be used to reformat simulcasts from racetracks 12. For
example, if racetracks 12 provide simulcasts as
traditional analog television channels, video

30   production system 14 (or a separate facility) may
convert these simulcasts or portions of these
simulcasts into digital signals (e.g., digital video

signals) or into a different number of analog signals. Digital video signals may require less bandwidth than analog video signals and may be appropriate for situations in which videos are to be transmitted over

5 either high or low bandwidth pathways. Low bandwidth pathways may include telephone lines, the Internet, etc.

Video production system 14 may be used to provide a television wagering service that includes

10 selected simulcast videos, video from studio 16, and graphic overlays to television distribution facilities 18 (for redistribution to user television equipment 22 and user computer equipment 20), to user computer equipment 20, and to user telephone equipment 32 (if

15 user telephone equipment 32 has a display capable of displaying moving images). Television distribution facilities 18 may be any suitable facilities for supplying television to users, such as cable system headends, satellite systems, broadcast television

20 systems, or other suitable systems or combinations of such systems. User computer equipment 20 may be any suitable computer equipment that supports an interactive wagering application. For example, user computer equipment 20 may be a personal computer. User

25 computer equipment 20 may also be based on a mainframe computer, a workstation, a networked computer or computers, a laptop computer, a notebook computer, a handheld computing device such as a personal digital assistant or other small portable computer, etc.

30 Each of television distribution facilities 18 is typically located at a different geographic location. Users with user television equipment 22 may

receive the television wagering service from an
associated television distribution facility. User
television equipment 22 may include, for example, a
television or other suitable monitor. A television may
5   be used to watch the television wagering service on a
traditional analog television channel. User television
equipment 22 may also include a digital or analog set-
top box connected to a television distribution facility
18 by a cable path. A digital set-top box may be used
10   to receive the television wagering service on a digital
channel. If desired, user television equipment 22 may
contain a satellite receiver, a WebTV box, a personal
computer television (PC/TV), or hardware similar to
such devices into which set-top box capabilities have
15   been integrated. A recording device such as a
videocassette recorder or digital recording device
(e.g., a personal video recorder or digital video
recorder based on hard disk drives or the like) may be
used in user television equipment 22 to store videos.
20   The recording device may be separate from or part of
the other components of user television equipment 22.

User computer equipment 20 may receive the
television wagering service using a video card or other
video-capable equipment to receive analog or digital
25   (e.g., moving picture experts group or MPEG) videos
from a television distribution facility. User computer
equipment 20 may also receive the television wagering
service directly from video production system 14 using,
for example, a modem link. If desired, the video for
30   the television wagering service may be compressed
(e.g., using MPEG techniques). This may be useful, for
example, if the path to user computer equipment 20 is a

modem connection using telephone links. If video
production system 14 is only used to serve user
computer equipment 20 without traditional analog
television capabilities, video production system 14 may
5   only need to supply such digitally-compressed video
signals and not analog television signals.

Video clips of races and other simulcast
information may be provided to users in the form of a
television wagering service or by an interactive
10 wagering service provided by the interactive wagering
application. If desired, race-related videos may be
provided to the user by using video production system
14 or other suitable equipment to route appropriate
video clips from the simulcasts to the user in real-
15 time. Video clips may also be stored for later
viewing. For example, one or more video servers
located at racetracks 12, video production system 14,
television distribution facilities 18, or other
suitable locations may be used to store video clips.
20 The stored videos may then be played back in real-time
or downloaded for viewing at user television equipment
22, user computer equipment 20, or user telephone
equipment 32. The video clips may contain videos of
races, commentary, interviews with jockeys, or any
25 other suitable race-related information. If desired,
real-time or stored videos may be provided from
racetracks 12 directly to user television equipment 22,
user computer equipment 20, or user telephone equipment
32 over the Internet or other suitable communications
30 paths without involving video production system 14.
Videos may also be provided by routing video signals
through equipment located elsewhere in system 10. For

example, videos may be routed through transaction processing and subscription management system 24.

Transaction processing and subscription management system 24 may contain computer equipment 26

5   and other equipment for supporting system functions such as transaction processing (e.g., handling tasks related to wagers, product purchasing, adjusting the amount of funds in user accounts based on the outcomes of wagers, video clip ordering, etc.), data

10 distribution (e.g., for distributing racing data to the users), and subscriber management (e.g., features related to opening an account for a user, closing an account, allowing a user to add or withdraw funds from an account, changing the user's address or personal

15 identification number, etc.). Databases within transaction processing and subscription management system 24 or associated with system 24 may be used to store racing data, wagering data and other transaction data, and subscriber data such as such as information

20 on the user's current account balance, past wagering history, individual wager limits, personal identification number, billing addresses, credit card numbers, bank account numbers, social security numbers, etc. Using such databases may allow the user to access

25 information more quickly and allows for central administration of the wagering service.

If desired, racing videos and other services may be provided using servers and other equipment located at transaction processing and subscription

30 management system 24. For example, video clips may be provided to the user on-demand. Interactive advertisements may be provided to the user. When the

user selects a desired advertisement, transaction
processing and subscription management system 24 may
provide additional information or other services
related to the advertisement to the user.

5   Product ordering services may be implemented
using computer equipment at transaction processing and
subscriber management system 24 to handle orders and to
assist in adjusting the appropriate account of the user
accordingly. Orders may be fulfilled using merchandise

10 fulfillment facilities 34. Merchandise fulfillment
facilities 34 may be operated solely to provide
merchandise fulfillment or may be associated with
independently-operated mail-order or on-line
businesses. Similar facilities may be used to allow

15 users to order services.
         Statistical racing data such as the post
times for each race, jockey names, runner names and the
number of races associated with each track,
handicapping information (e.g., information on past

20 performances such as the number of wins and losses for
the past year, etc.), and weather conditions at various
tracks may be provided by racing data collection and
processing system 28. Some of the data may be
collected from racetracks 12 and some may be provided

25 by third party information sources such as Axcis Pocket
Information Network, Inc. of Santa Clara, California or
other suitable data sources.
         Racing data may also be provided from
totalisators 30. Totalisators 30 are the computer

30 systems that may be used to handle wagers made at the
racetracks, made at off-track betting establishments,
and made using interactive wagering system 10.

Totalisators 30 generate wagering odds in real-time. Totalisators 30 generate these odds based on information on which wagers are being placed (e.g., based on information on which wagers are being placed on races at racetracks 12). Totalisators 30 are available from companies such as Amtote International, Inc. of Hunt Valley, Maryland. Totalisators 30 may be associated with individual racetracks 12 or groups of racetracks 12. Totalisators 30 may communicate with one another using a communication protocol known as the Intertote Track System Protocol (ITSP). This allows totalisators 30 to share wagering pools. Totalisators 30 may provide racing data including information on the current races at racetracks 12, the number of races associated with each racetrack, win, place, and show odds and pool totals for each horse or other runner, and exacta, trifecta, and quinella payoff predictions and pool totals for every possible combination of runners. Totalisators 30 may also provide current odds and other real-time racing data for other types of wagers. Totalisators 30 may provide the time until post time for each race.

Totalisators 30 may provide race results, such as the order-of-finish list for at least the first three positions and payoff values versus a standard wager amount for win, place, and show, for each runner in the finish list. Payoff values may be provided for winning complex wager types such as exacta, trifecta, quinella, pick-n (where n is the number of races involved in the pick-n wager), and daily double. The payoff values may be accompanied by a synopsis of the associated finish list.

Totalisators 30 may also provide program information of the type typically provided in printed racing programs. Such program information may include early odds, early scratches, race descriptions

5 (including the distance of each race and the race surface - grass, dirt, artificial turf, etc.), allowed class ratings (based on a fixed ratio of external criteria), purse value (payoff to winning runner), allowed age range of runners, and the allowed number of

10 wins and starts for each runner.

If desired, some of the information provided to transaction processing and subscription management system 24 by totalisators 30 (such as the program information or other suitable racing data) may be

15 provided by racing data collection and processing system 28. Similarly, some of the information provided to transaction processing and subscription management system 24 by racing data collection and processing system 28 may be provided by totalisators 30.

20 Moreover, the foregoing examples of different suitable types of racing data are merely illustrative. Any suitable data related to racing may be provided to transaction processing and subscription management system if desired.

25 Transaction processing and subscription management system 24 provides the racing data to users at user television equipment 22, user computer equipment 20, and user telephone equipment 32 for use in following race results and developing wagers. If

30 desired, racing data may be provided to users using paths that do not directly involve transaction processing and subscription management system 24. For

example, racing data may be provided from racing data collection and processing system 28 to user television equipment 22, user computer equipment 20, or user telephone equipment 32 using the Internet or other

5 suitable communications paths.

User telephone equipment 32 may be a conventional telephone, a cordless telephone, a cellular telephone or other portable wireless telephone, or any other suitable telephone equipment.

10 Users at user television equipment 22 and user computer equipment 20 may view information on the racing data on a television or other suitable monitor. Users at user telephone equipment 32 may listen to racing data using an interactive voice system. User telephone equipment

15 32 may be based on cellular telephones with displays. Users may view racing data displayed on such displays.

Users who wish to place wagers may establish an account at transaction processing and subscription management system 24. An account may also be

20 established at one of totalisators 30. The user and the interactive wagering services may have their own bank accounts at financial institutions 38. A user may set up an account electronically by using user television equipment 22, user computer equipment 20, or

25 user telephone equipment 32 to interact with the subscriber management functions of transaction processing and subscription management system 24. If desired, accounts may be established with the interactive wagering service with the assistance of

30 customer service representatives at customer service facility 36. Customer service facility 36 may be at the same location as transaction processing and

subscription management system 24, may be part of
system 24, or may be located remote from system 24.
Customer service representatives at customer service
facility 36 may be reached by telephone. If user
5   telephone equipment 32 is used to access the
interactive wagering service, for example, user
telephone equipment 32 may be used to reach the
customer service representative using communications
path 42. If user television equipment 22 or user
10   computer equipment 20 is being used with the service, a
telephone at the same location as that equipment may be
used to reach the customer service representative.

The user's identity may be checked using
social security number information or other
15   identification information with the assistance of
subscriber verification facility 40. The services of
subscriber verification facility 40 are used to ensure
that the user lives in a geographic area in which
wagering is legal, that the user is of a legal age, and
20   that the identification information (e.g., the user's
social security number) matches the name provided by
the user. If the user is using a cellular telephone or
handheld computing device, the user's present physical
location may be determined by determining which general
25   part of the cellular telephone network is being
accessed by the user or by using the cellular network
or a handset-based location device such as a global
positioning system (GPS) receiver in the body of the
cellular telephone to pinpoint the user's location.
30   This location information may be used to verify that
the user is located in a geographic area where wagering
is legal.

In a typical enrollment process, the user provides personal information to the interactive wagering service and provides funds with a credit card or funds from the user's bank account. The interactive

5 wagering service sets up an account for the user at transaction processing and subscription management system 24 and directs one of totalisators 30 to set up a new account for the user at the totalisator. The totalisator is also directed to credit the user's

10 account to reflect the amount of funds provided by the user. After the user places a wager and wins or loses, the totalisator adjusts the user's totalisator account to reflect the outcome of the wager. The totalisator may periodically inform the interactive wagering

15 service of the adjusted balance in the user's account. This may be accomplished using any suitable technique (e.g., periodically, continuously, on-request, etc.). For example, reports may be collected periodically (e.g., once a day in an end-of-day report) and provided

20 to the interactive wagering service to reconcile the account balances at transaction processing and subscription management system 24 with the account balances at totalisators 30.

If the user makes a balance inquiry, the

25 inquiry may be passed to the appropriate totalisator by transaction processing and subscription management system 24. If the user is charged a fee for subscribing to the service, the service may debit the fee from the user's account at the transaction

30 processing and subscription management system 24.

The accounts at totalisators 30 and transaction processing and subscription management

system 24 are typically maintained separately, because
the business entities that operate totalisators 30 and
transaction processing and subscription management
system 24 are independent. If desired, financial

5   functions related to opening and maintaining user
accounts and the like may be handled using computer
equipment at another location such as one of financial
institutions 38 or other location remote from
totalisators 30 and system 24. Such financial

10 functions may also be implemented primarily at a
totalisator 30 or primarily at the transaction
processing and subscription management system 24 if
desired.

Users at user television equipment 22, user

15 computer equipment 20, and user telephone equipment 32
may place wagers by providing wagering data and
otherwise interacting with transaction processing and
subscription management system 24. The interactive
wagering service may provide a user at user television

20 equipment 22, user computer equipment 20, or user
telephone equipment 32 that has display capabilities
with screens containing various racing data. For
example, the user may be presented with screens that
allow the user to view the current odds for horses in

25 an upcoming race at a given track.

The service may provide the user with
interactive screens containing menus and selectable
options that allow the user to specify the type of
wager in which the user is interested and the desired

30 wager amount. With a set-top box arrangement, for
example, the user may use a remote control or wireless
keyboard to navigate the various menus and selectable

options. With a personal computer, the user may use a keyboard, mouse, trackball, touch pad, or other suitable input or pointing device. With a cellular telephone with a display, the user may use buttons on

5   the telephone. When the user has made appropriate selections to define a desired wager, the user television equipment, user computer equipment, or user telephone equipment may transmit wagering data for the wager to transaction processing and subscription

10 management system 24.

Users with telephones may also interact with the service using an interactive voice response system located at transaction processing and subscription management system 24. The interactive voice response

15 system may present menu options to the user in the form of audio prompts (e.g., "press 1 to select a $2 wager amount," etc.). The user may interact with the service be pressing the corresponding buttons on a touch tone telephone. User telephone equipment 32 that is based

20 on cellular telephones allows the user to interact with the wagering service in this way. User telephone equipment 32 that is based on cellular telephones with messaging and display capabilities also allows the user to interact visually with the interactive wagering

25 service.

The components of system 10 may be interconnected using various communications paths 44. Communications paths 44 may include satellite paths, coaxial cable paths, fiber-optic paths, twisted pair

30 paths, other wire or cable-based links, wireless paths through free space, or any other suitable paths or combination of such paths. Communications over paths

44 may involve analog transmissions, digital
transmissions, wireless transmissions, microwave
transmissions, radio-frequency transmissions, optical
transmissions, audio transmissions, or any other
5   suitable type of transmissions or combination of such
transmissions. Communications may involve Internet
transmissions, private network transmissions, packet-
based transmissions, television channel transmissions,
transmissions in the vertical blanking interval of a
10   television channel or on a television sideband, MPEG
transmissions, etc. Communications may involve
wireless pager or other messaging transmissions.
Communications paths 44 may include cable connected to
cable modems, digital subscriber lines, integrated
15   services digital network (ISDN) lines, or any other
suitable paths. Examples of suitable communications
paths are described below. Those examples are,
however, merely illustrative. Any of the
communications path arrangements described above or
20   other suitable arrangements may be used if desired.

       Communications paths that carry video and
particularly uncompressed analog video or lightly-
compressed or full-screen digital video generally use
more bandwidth than communications paths that carry
25   only data or that carry partial-screen digital video.
For example, if it is desired to transmit high-quality
simulcasts of races from racetracks 12 to video
production system 14, analog or digital videos may be
transmitted from racetracks 12 to video production
30   system 14 over path 44a using satellite links. Video
may be transmitted from studio 16 to video production
system 14 over path 44b using a satellite link or a

high-speed terrestrial path such as a fiber-optic path.
Studio 16 may also be located at the same site as video
production system 14, thereby avoiding the need for a
long-haul transmission path. Videos may be transmitted

5   from video production system 14 to user computer
equipment 20 over path 44c using a modem link (using,
for example, a digital subscriber line, a telephone
network link, a wireless link etc.) .The modem link may
be made over a private network.

10   A user with a cable modem may connect a
personal computer or other such user computer equipment
20 to an associated cable system headend using path
44d. (The headend in such an arrangement would be one
of the television distribution facilities 18 shown in

15   FIG. 1.) The user may then receive videos from the
headend via cable modem. Videos may be provided to the
headend over path 44e using a network link, fiber optic
links, cable links, microwave links, satellite links,
etc. A user with a set-top box or similar device

20   (shown in FIG. 1 as user television equipment 22) may
also receive videos from a cable system headend using a
cable modem or other such communications device over
path 44f. In addition, a user with user television
equipment may receive videos over the Internet or a

25   private network using a telephone-based modem or other
such communications device using path 44g. In a system
with distributed processing, interactive wagering
services may be provided using a television
distribution facility 18 that includes equipment that

30   supplements or replaces at least some of the equipment
at transaction processing and subscription management
system 24.

If desired, user television equipment 22 or
user computer equipment 20 may receive analog or
digital videos from an associated television
distribution facility over the communications paths
5   normally used to distribute television programming
(e.g., paths 44f and 44d). For example, videos may be
received as part of a dedicated interactive wagering
service television channel. If videos are provided as
digital signals (e.g., MPEG signals), 10 or more
10 digital videos may be carried on a single analog
channel (or one digital video may be carried on one-
tenth of the bandwidth of an analog channel). If the
videos are not full-screen videos, even more videos may
be simultaneously provided without a loss of image
15 quality.

Racing videos may be provided to user
telephone equipment 32 over a partially-wireless
telephone Internet link or other telephone link using
path 44n.

20   If desired, racing data may accompany the
racing videos along any of these paths. Moreover,
racing videos may be provided by routing them directly
from racetracks 12 to user television equipment 22,
user computer equipment 20 (e.g., over the Internet or
25 a private network, etc.), or user telephone equipment
32. Racing videos may also be provided by routing them
through transaction processing and subscription
management system 24. If a cellular telephone or
portable computing device has sufficient display
30 capabilities to support moving images, racing videos
may be displayed. Such videos may be provided using
any suitable path, such as a direct path from

racetracks 12, a path through video production system
14 or other suitable video processing equipment,
through a hub such as transaction processing and
subscription management system 24, etc. Racing videos
5 may be provided in real-time or may be recorded for
later distribution. Videos that are not provided in
real-time may be downloaded by user television
equipment 22, user computer equipment 20, a cellular
telephone, or other suitable user equipment at a lower
10 data rate than would otherwise be required and may be
downloaded in the background if desired. Such videos
may also be provided to the user at real-time video
rates for direct viewing by the user.

Racing data and other information related to
15 the interactive wagering service may be provided to
users over paths connected to transaction processing
and subscription management system 24. For example,
racing data and other data for the service may be
provided to user computer equipment 20 over path 44h
20 using a modem link. Path 44h may be a private network
path or an Internet path. Path 44h may use telephone
lines, digital subscriber lines, ISDN lines, wireless
data paths, or any other suitable type of
communications links. User television equipment 22 may
25 receive data for the wagering service over
communications path 44i, which may be a telephone line,
digital subscriber line, ISDN line, or other suitable
type of communications path and which may use a private
network path or an Internet path, etc.
30 Data for the wagering service may be provided
to users of the interactive wagering application via
communications path 44j and paths 44f and 44d.

Communications path 44j may be provided over a private network, using the public telephone network, using satellite links, or any other suitable type of links. Data from paths such as path 44j may be routed to paths

5   such as paths 44f and 44d directly by associated television distribution facilities 18, or may be buffered at television distribution facilities 18 if desired. Paths 44f and 44d may include coaxial cable and use of paths 44f and 44d may involve the use of

10   cable modems or the like. If data is provided over path 44j and path 44f or path 44d using an Internet protocol, a web browser or similar software running on user television equipment 22 or user computer equipment 20 may be used to access the data. Such software may

15   be integrated into the interactive wagering application or may be used separately. Software may also be used to view videos and may be used on other platforms (e.g., advanced cellular telephones) if desired.

The communications paths 44k that are used to

20   connect various other components of the system typically do not carry high-bandwidth video signals. Accordingly, paths 44k may be telephone-like paths that are part of the Internet or a private network. Such paths and various other paths 44 may be dedicated

25   connections for security, reliability, and economy.

User telephone equipment 32 may receive information for the wagering service via path 44m. If user telephone equipment 32 is a standard (non-cellular) telephone, such information may be in the

30   form of audio prompts (e.g.,"press 1 to place a wager") and audio racing data ("the current win odds for horse 2 are 5-1"). Transaction data processing and

subscription management system 24 may contain
interactive voice response equipment that provides such
information to the user and that responds to touch-tone
signals from the user when the user responds to prompts
5   by pressing buttons on the user's telephone.

If user telephone equipment 32 is a cellular
telephone, racing data and other information for the
interactive wagering service may be provided to the
user by using a cellular wireless connection as part of
10 path 44m. Users with cellular telephones may be
provided with audio prompts using an interactive voice
response system located at transaction processing and
subscription management system 24 to which the users
may respond by pressing cellular telephone buttons to
15 generate touch-tone signals.

Racing data and other information for the
interactive wagering service may be provided to
cellular telephones in the form of alphanumeric
messages. Such messages may be transmitted to the user
20 by using paging or other alphanumeric messaging formats
or any other suitable data communications scheme. If
desired, data may be provided to the cellular
telephones over the voice channel and decoded by the
cellular telephone using modem circuitry or other
25 suitable circuitry. Data may also be provided using
any other suitable cellular or wireless path.
Regardless of the way in which racing data and other
information for the interactive wagering service are
provided to the cellular telephone, such information
30 may be provided to the user by displaying it on the
cellular telephone display screen or by presenting it

in audible form through the speaker of the cellular telephone.

Racing data and other interactive wagering service information for the users may be provided in one or more continuous data streams, may be provided periodically (e.g., once per hour or once per day), or may be provided using a client-server arrangement in which data is requested by a client processor (e.g., user television equipment 22, user computer equipment 20, user telephone equipment 32, or any other such equipment) from a server (e.g., a server implemented using computer equipment 26 at transaction processing and subscription management system 24 or computer equipment at another suitable location. Videos may also be provided using any of these techniques.

A return communications path between the user and the interactive wagering service may be used to allow the user to place wagers and otherwise interact with the interactive wagering service. For example, a user with a standard telephone or a cellular telephone may interact with the service by pressing touch-tone keys on the telephone in response to audio prompts provided by an interactive voice response system at transaction processing and subscription management system 24. If desired, users may call customer service representatives at customer service facility 36 and place wagers with manual assistance. The user of a cellular telephone may interact with the wagering service by selecting menu options and otherwise interacting with information displayed on the cellular telephone. When a selection is made, software implemented on the telephone may be used to assist the

user in transmitting appropriate data (e.g., wagering data) to the wagering service. Such data may be transmitted using any suitable technique. For example, data may be transmitted using a wireless data link that

5 is separate from the cellular voice channels. Data may also be transmitted over the voice channel (e.g., using a modem built into the cellular telephone, by automatically generating touch-tone signals that may be recognized by the interactive voice response system at

10 transaction processing and subscription management system 24, or using any other suitable arrangement). These approaches may be used even if the user receives racing data and other information for the service using a platform other than a telephone-based platform.

15 Users with user television equipment 22 may interact with the service by sending data (e.g., wager data) to transaction processing and subscription management system 24 using path 44i or using paths 44f and 44j. Users with user computer equipment 20 may

20 send data (e.g., wager data) to transaction processing and subscription management system 24 via path 44h or paths 44d and 44j. Users at any user equipment may send data for the service to locations other than transaction processing and subscription management

25 system 24. For example, the user may provide information directly to customer service facility 36, etc.

If desired, the user may send data to the service at transaction processing and subscription

30 management system 24 using different paths than those used to receive data from transaction processing and subscription management system 24. For example, racing

data may be received at user television equipment 22
via paths 44j and 44f, whereas data may be sent by the
user from user television equipment 22 to transaction
processing and subscription management system 24 using
5   path 44i, etc. Moreover, the paths used to receive
certain video information may be different from those
used to receive racing data. For example, user
television equipment 22 may receive racing videos using
path 44f, but may receive racing data using path 44i.
10 These examples are merely illustrative. Any suitable
combination of paths may be used to distribute racing
data and other information for the interactive wagering
service, any suitable combination of paths may be used
to receive videos, and any suitable combination of
15 paths may be used to send data to the wagering service.

If desired, the user may interact with the
wagering service using more than one platform. For
example, the user may place a wager using a cellular
telephone while the user is driving home. When the
20 user arrives home, the user may determine the outcome
of the wager by watching a video of the race on user
television equipment. Later in the day, the user may
check the user's account balance using a personal
computer. This is merely an illustrative example. The
25 various wagering platforms may be used in any suitable
combination.

Although system 10 has been described in the
context of a system that supports multiple wagering
platforms, system 10 may support fewer platforms if
30 desired. For example, aspects of the invention may be
implemented using a system 10 that only supports
cellular telephone wagering or wagering using handheld

computer devices. If desired, system 10 may be
configured so that it does not support personal
computer wagering, wagering with standard telephones,
or wagering with user television equipment. The system
5   may support cellular telephones and/or handheld
computing devices such as personal digital assistants,
palm-sized computers, etc. in combination with any
other suitable platform.

The automatic horse selection features of the
10   present invention are described herein primarily in the
context of an interactive wagering application
implemented on user computer equipment such as a
personal computer. This is only illustrative. An
interactive wagering application implemented on any
15   suitable platform (user television equipment, user
telephone equipment, etc.) may be used to provide such
features if desired. In set-top box arrangements, on-
screen options may be made larger than they appear in
computer-based arrangements to accommodate the greater
20   viewing distance from which televisions are typically
operated. Options may be selected by highlighting them
using remote control arrow keys and by pressing an
appropriate key such as an OK or enter or select key.
In cellular telephone arrangements and handheld
25   computer arrangements, options and information may be
displayed using smaller screens than are typically
available on personal computer or set-top box
arrangements. To accommodate the smaller screen size,
options that might otherwise be presented on a single
30   screen may be displayed using multiple screens or
layered menus. Options may be selected by highlighting
them using navigation keys and pressing an appropriate

select button on the cellular telephone or handheld computing device or by using a pen-based interface or the like.

The interactive wagering application may be
5   implemented using application software that runs primarily on user television equipment, user computer equipment, user telephone equipment, or another local platform, or using a remote server or other computer that is accessed from the local platform.   Arrangements
10 in which interactive wagering services are implemented using software on remote computers that is accessed on-demand from local platforms may be referred to as client-server arrangements.   Such client-server arrangements may be used to allow client processes set-
15 top boxes or other platforms to access server processes running on servers located at cable system headends or other television distribution facilities 18 (FIG. 1). Regardless of the type of system architecture or platform used, the software that supports the
20 interactive wagering service features described herein may be referred to as an interactive wagering application.

In a set-top box environment, the system may allow the user to launch the application by pressing a
25 menu option in an interactive television program guide or other set-top box application or menu.   If desired, the application may be launched automatically whenever the user tunes to a particular channel (e.g., the television wagering channel).   After the user has tuned
30 to this channel, the system may display an interactive icon on the user's television screen that indicates that the interactive wagering application is available.

If the user presses an "OK" remote control key, the system may launch the application.

In a computer-based system, the user may access the interactive wagering application by browsing to an Internet web site or a site on a private network.

Systems based on cellular telephones or the like may be launched by selecting an appropriate on-screen menu option presented on the display of the cellular telephone.

An illustrative display screen 46 that may be provided by the interactive wagering application is shown in FIG. 2. Screen 46 and the screens shown in FIGS. 3-7 are examples of screens that may be displayed on a personal computer or other user computer equipment 20. The format and contents of such screens may be modified to accommodate different platforms such as user television equipment and user telephone equipment platforms if desired. Moreover, the information and options of the screens of FIGS. 2-7 may be provided using audio prompts to accommodate telephone-based wagering from touch-tone telephones without display screens.

As shown in FIG. 2, screen 46 may include a race ticket region 48 in which information about the wager that the user is currently building may be displayed. A list 50 of tracks may be provided from which the user may select a desired racetrack for which to place a wager. For example, the user may click on a track name of interest by using a mouse, trackball, or other pointing device to move pointer 52 on top of the desired name in list 50.

Track status information 54 may be provided for each track. For example, information may be provided on whether the track is open or closed.

If desired, information 56 may be provided that indicates the current race at each track. Post time information 58 may be provided for races that are still open.

After the user of the interactive wagering application selects a desired racetrack from screen 46, the application may display a race selection screen such as screen 60 of FIG. 3. As shown in FIG. 3, screen 60 may contain track information 62 in the race ticket region 48. Track information 62 shows the user which racetrack was selected using screen 46.

A list 64 of available races at the selected track may be displayed. The user may select a desired race from list 64 by clicking on the name for the race.

Race status information 66 my indicate which races are open and which races are closed.

Post time information 68 may indicate the post times for each race.

The user may return to track selection screen 46 of FIG. 2 to select a different track by selecting track option 70.

On screen 60 and the other screens of FIGS. 2-7, tabs 72 may be used to indicate the user's present location within the interactive wagering application. The user may select from proBet (a streamlined wagering interface for experienced users), easyBet (a more full-featured interface for novice users), Handicap (features that allow the user to obtain handicapping information), Track Info (information on various

racetracks), Player Info (features that support
wagering by multiple users), Setup (for setting up
various settings of the interactive wagering
application), and Help (context-sensitive help

5   information).

A bar 74 or other suitable region may be
displayed below tabs 72 (or in any other suitable
location) that indicates the user's location within the
wager creation process. The user's current location

10 (e.g., the race selection menu of screen 60) may be
indicated by coloring the appropriate word (e.g., the
word "race" in the example of FIG. 3).

After the user has selected a desired race at
the selected racetrack, the user may be presented with

15 a screen such as screen 76 of FIG. 4. Screen 76 may
allow the user to select a wager type for the wager.
On screen 76, race ticket region 48 may be updated to
include information 78 on which race was selected on
screen 60. In the example of FIG. 4, the information

20 78 reflects that the selected race is race No. 7.

If desired, a default wager type may be
highlighted on screen 76. In the example of FIG. 4,
option 80 for a win wager has been highlighted. If the
user wishes to place a win wager, the user may proceed

25 to the horse selection menu by selecting horse option
82. If the user would like to place a different type
of wager (e.g., a place wager, a show wager, etc.), the
user may select one of the other wager type options 84
by clicking on that option. Information 86 may be

30 provided in race ticket region 48 that indicates the
highlighted wager type.

The user may return to race selection screen 60 by selecting option 88.

After the has selected a desired wager type (e.g., a win wager in the example of FIG. 4), the interactive wagering application may present a horse selection screen to the user such as horse selection screen 90 of FIG. 5. Information 86 may be included in race ticket region 48 to indicate which wager type has been selected.

If desired, the user may select one or more horses for the wager by clicking on the appropriate horse options 92.

The interactive wagering application may provide an option such as E-Z pick option 94 that allows the user to direct the interactive wagering application to automatically pick the user's horses without intervention by the user. The option may be provided as a single clickable button such as option 94 or may be provided by multiple buttons. If desired, the option may be provided on a different screen than horse selection screen 90.

Regardless of how the automatic horse selection option is provided, the user may select the option when the user does not wish to manually select horses. When the user selects the automatic horse selection option, the interactive wagering application may automatically and randomly generate one or more horses to use for the user's wager. For example, if the user is placing a win wager, the interactive wagering application may pick a single horse for the win wager when the user selects option 94. If the user is placing an exacta wager, the interactive wagering

application may automatically and randomly select two
horses (a first place finisher and a second place
finisher) for the exacta wager.

Because the user does not need to decide
5   which particular horses to wager on, this feature may
be attractive for novice users who are not familiar
with the various horses who are running in a race. The
feature may also be attractive to more experienced
wagerers who occasionally would like to make a random
10   selection (either as a stand-alone wager or as part of
a group of wagers).

After the interactive wagering application
has randomly selected a horse for the wager, the user
may modify this selection by adding other horses or
15   deselecting some or all of the randomly-selected
horses.

If desired, a graphic image 96 may be
provided to accompany the random selection of the
horses. The graphic images may be related to the
20   horses that are selected. For example, the graphic
images may include the horse numbers that are selected.
The graphic images may include animation. For example,
an animated spinning wheel or the like may be provided
that stops on the randomly-selected horse numbers.
25   This is merely an illustrative example. Any suitable
graphic images may be provided.

Moreover, other criteria for the wager may be
selected randomly if desired. For example, the
interactive wagering application may randomly select a
30   racetrack, may randomly select a race, may randomly
select a wager type, may randomly select a wager
amount, etc. If desired, one, two, three, or any other

suitable number of these multiple criteria may be
randomly selected. For example, the interactive
wagering application may provide an option that
automatically randomly creates entire wagers for the
5   user. When the user selects the option, a race ticket
region may be provided in which all of the randomly-
selected components of a complete wager are listed.
The user may then decide whether or not to place the
wager.

10   In the example of FIG. 5, the user may return
to wager type selection screen 76 by selecting option
98. The user may advance towards completing the wager
by selecting amount option 100.

          If the user selects amount option 100 of FIG.
15   5, the user may be presented with a screen such as
amount selection screen 102 of FIG. 6. In amount
selection screen 102, race ticket region 48 may include
information 104 on the selected horse or horses. In
the example of FIG. 6, information 104 reflects that
20   the interactive wagering application randomly selected
horse number 2 for the user's win wager when the user
selected E-Z pick option 94.

          Race ticket region 48 in FIG. 6 also contains
information 106 that reflects the default highlighted
25   wager amount. Information 107 reflects the total cost
of the wager, which may differ from the cost
represented by information 106 when, for example,
multiple horses have been selected for a wager that
requires only one horse.

30   In the example of FIG. 6, $2 option 108 is
highlighted by default and information 106 reflects
this amount. The $2 amount is merely illustrative.

Any suitable amount may be selected as a default. Moreover, no default amount need be selected. The user may be required to select a wager amount. If desired, the wager amount may be selected as a default only if

5 some part of the wager is being generated randomly. Because this feature may be used by novices, it may be desirable for the default amount to be set at $2.

If the user desires to change the default amount to another amount (even if the horses or other

10 aspects of the wager have been selected randomly), the user may select one of the other wager amount options 110.

Option 112 may be provided to allow the user to return to horse selection screen 90.

15 When the user is ready to place the wager, the user may select bet queue option 114.

When the user selects bet queue option 114, the interactive wagering application may present a screen such as wager list screen 116 of FIG. 7. Screen

20 116 may contain information 118 on the selected track for the wager, information 120 on the selected race number for the wager, and information 122 on the selected wager amount for the wager. Information 124 may also be included on the selected wager type for the

25 wager. Information 126 may be presented on which horses have been selected for the wager. If the race involves runners other than horses (e.g., dogs, etc.), the numbers for those runners may be presented instead of horse numbers.

30 Information 128 on the cost of each wager may be presented in a column. The total cost 130 of all of the wagers added together may also be presented.

Option 131 may be provided to allow the user to delete wagers from the list of screen 116. Duplicate option 132 may allow the user to duplicate a wager.

5   The interactive wagering application may support multiple users. For example, multiple users in a home may access the interactive wagering application through a common personal computer. Personal identification numbers (PINs) may be created for each

10   user. When the user enters a PIN when signing into the system, the interactive wagering application may look up the user's name and may display the user's name in region 134.

Amount option 136 may be used to return wager

15   amount screen 102 of FIG. 6.

When the user is satisfied with the wagers listed in screen 116, the user may select send in saved wagers option 138. This submits the wagers from the user's device (e.g., user computer equipment 20, etc.)

20   to transaction processing and subscription management system 24 of FIG. 1. Transaction processing and subscription management system 24 may then process the wager and credit or debit the user's account according to the results of the race.

25   Illustrative steps involved in allowing the user to use the interactive wagering application to wager with randomly-generated horse numbers are shown in FIG. 8. At step 140, the interactive wagering application may provide the user with an opportunity to

30   select a track. For example, a user at user computer equipment 20 may be provided with a screen containing on-screen options that the user may select to choose a

desired track. A user at user television equipment 22 or user telephone equipment 32 having a display may also be provided with an opportunity to select a desired track using on-screen options or the like. A

5   user at user telephone equipment 32 without (or with) a display may be presented with audio prompts to which the user may respond by pressing appropriate touch-tone keys to select a desired track.

     At step 142, the interactive wagering

10 application may provide the user with an opportunity to select a race at the selected track. For example, a user at user computer equipment 20 may be provided with a screen containing on-screen options that the user may select to choose a desired race. A user at user

15 television equipment 22 or user telephone equipment 32 having a display may also be provided with an opportunity to select a desired race using on-screen options or the like. A user at user telephone equipment 32 without (or with) a display may be

20 presented with audio prompts to which the user may respond by pressing appropriate touch-tone keys to select a desired race.

     At step 144, the interactive wagering application may provide the user with an opportunity to

25 select a desired wager type. For example, a user at user computer equipment 20 may be provided with a screen containing on-screen options that the user may select to choose a desired wager type. A user at user television equipment 22 or user telephone equipment 32

30 having a display may also be provided with an opportunity to select a desired wager type using on-screen options or the like. A user at user telephone

equipment 32 without (or with) a display may be
presented with audio prompts to which the user may
respond by pressing appropriate touch-tone keys to
select a desired wager type.

5   The wager amount selection process may be
performed before or after the horses for the wager are
selected or at any other suitable time. For example,
the wager amount selection process may take place just
before the horses have been selected.

10   With this type of arrangement, the
interactive wagering application may provide the user
with an opportunity to select a desired wager amount at
step 146. For example, a user at user computer
equipment 20 may be provided with a screen containing

15   on-screen options that the user may select to choose a
desired wager amount. A user at user television
equipment 22 or user telephone equipment 32 having a
display may also be provided with an opportunity to
select a desired wager amount using on-screen options

20   or the like. A user at user telephone equipment 32
without (or with) a display may be presented with audio
prompts to which the user may respond by pressing
appropriate touch-tone keys to select a desired wager
amount.

25   The interactive wagering application may
provide the user with an opportunity to select desired
horses for the wager at step 148. For example, a user
at user computer equipment 20 may be provided with a
screen containing on-screen options that the user may

30   select to choose certain desired horses manually. The
screen may also contain an option such as E-Z pick
option 94 of FIG. 5 in addition to or instead of the

manual horse selection options. A user at user
television equipment 22 or user telephone equipment 32
having a display may also be provided with a screen
containing on-screen options that the user may select
5   to choose certain desired horses manually. The screen
provided with user television equipment 22 or user
telephone equipment 32 may also contain an option such
as E-Z pick option 94 of FIG. 5 in addition to or
instead of the manual horse selection options. A user
10 at user telephone equipment 32 without (or with) a
display may be presented with audio prompts to which
the user may respond by pressing appropriate touch-tone
keys to select horses either manually or automatically
(using the randomly-generated selections of the
15 interactive wagering application).

    If, at step 148, the user opts to have the
interactive wagering application randomly select the
horses for the user, the interactive wagering
application may perform this function at step 150.
20 Numbers may be randomly selected using a random number
generation application at transaction processing and
subscription management system 24 (e.g., on computer
equipment 26), or on user television equipment 22, user
computer equipment 20, or user telephone equipment 32,
25 or at television distribution facilities 18, or any
other suitable location or platform.

    After the user selects the horses manually or
the interactive wagering application selects the horses
automatically, the user may be provided with an
30 opportunity to submit the wager to transaction
processing and subscription management system 24 at
step 152. For example, a user at user computer

equipment 20 may be provided with a screen containing an on-screen option that the user may select when the user desires to submit the wager. A user at user television equipment 22 or user telephone equipment 32

5 having a display may also be provided with an opportunity to submit a wager using an on-screen option or the like. A user at user telephone equipment 32 without (or with) a display may be presented with audio prompts to which the user may respond by pressing

10 appropriate touch-tone keys to submit a desired wager.

After the user has submitted the wager at step 152, the wager may be processed by transaction processing and subscription management system 24 (FIG. 1) at step 154.

15 If desired, the randomly-generated horse number feature of the present invention may be used with other types of racing, such as dog or harness racing (a type of horse racing). An E-Z pick option may be provided for supporting these types of wagering.

20 When the user selects the E-Z pick option, the interactive wagering application randomly picks the numbers of the appropriate runners (e.g., dogs or harness racers, etc.).

The foregoing is merely illustrative of the

25 principles of this invention and various modifications can be made by those skilled in the art without departing from the scope and spirit of the invention.